

AMENDMENTS TO THE CLAIMS:

If entered, this listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (currently amended) A Multi Line Addressing (MLA) Liquid Crystal Display (LCD) system comprising:

a display unit; and

a display controller device, wherein the lines for each common

sub-group, each common sub-group comprising more than one consecutive

lines, between said display unit and said display controller device are

interlaced from top to bottom of the display unit in a way that a first common

sub-group is driven from a first side of the display controller device, a second

common sub-group is driven from the opposite to first side of the display

controller device, a third sub-group is driven from the first side again, a fourth

common sub-group is driven from said opposite side again, and so on until the

bottom of the display unit is reached.

2. (original) The system of claim 1 wherein said MLA common sub-group comprises any number of lines.

3. (original) The system of claim 1 wherein said MLA common sub-group comprises three lines.

4. (original) The system of claim 1 wherein said MLA LCD display is having an active matrix.
5. (original) The system of claim 1 wherein said MLA LCD display is having a passive matrix.
6. (original) The system of claim 5 wherein said MLA LCD display is an MLA Twisted Nematic (TN) LCD display.
7. (original) The system of claim 6 wherein said MLA Twisted Nematic LCD display is an MLA Super Twisted Nematic (STN) LCD display.
8. (original) The system of claim 6 wherein said MLA Twisted Nematic LCD display is an MLA Double Super-Twisted Nematic (DSTN) LCD display.
9. (currently amended) A Multi Line Addressing (MLA) Liquid Crystal Display (LCD) system comprising:
 - a display unit; and
 - a display controller device, wherein a number of MLA common sub-groups, each common sub-group comprising more than one consecutive lines, are bundled into MLA common groups and the lines for each common group between said display unit and said display controller device are interlaced from top to bottom of the display unit in a way that a first MLA

common group is driven from a first side of the display controller device, a second common group is driven from the opposite to first side of the display controller device, a third common group is driven from the first side again, a fourth common group is driven from said opposite side again, and so on until the bottom of the display unit is reached.

10.(original) The system of claim **9** wherein said MLA common sub-group comprises any number of lines.

11.(original) The system of claim **9** wherein said MLA common sub-group comprises three lines.

12.(original) The system of claim **9** wherein said MLA LCD display is having an active matrix.

13.(original) The system of claim **9** wherein said MLA LCD display is having a passive matrix.

14.(original) The system of claim **13** wherein said MLA LCD display is an MLA Twisted Nematic (TN) LCD display.

15.(original) The system of claim **14** wherein said MLA Twisted Nematic LCD display is an MLA Super Twisted Nematic (STN) LCD display.

16. (original) The system of claim **14** wherein said MLA Twisted Nematic LCD display is an MLA Double Super-Twisted Nematic (DSTN) LCD display.

17. (currently amended) The system of claim **69** wherein said MLA common groups comprise two MLA common sub-groups.

18. (currently amended) The system of claim **69** wherein said MLA common groups comprise three MLA common sub-groups.

19. (currently amended) A Liquid Crystal Display (LCD) system comprising:

- a display unit; and
- a display controller device, wherein a number of consecutive common signal lines are bundled into common signal groups and the lines for each common signal group between said display unit and said display controller device are interlaced from top to bottom of the display unit in a way that a first common signal group is driven from a first side of the display controller device, a second common signal group is driven from the opposite to first side of the display controller device, a third common signal group is driven from the first side again, a fourth common signal group is driven from said opposite side again, and so on until the bottom of the display unit is reached.

20. (original) The system of claim **19** wherein said common signal group comprises any number of lines.

21.(original) The system of claim **19** wherein said common signal group comprises two lines.

22.(original) The system of claim **19** wherein said common signal group comprises two lines.

23.(original) The system of claim **19** wherein said LCD display is having a passive matrix.

24.(original) The system of claim **23** wherein said LCD display is a Twisted Nematic (TN) LCD display.

25.(original) The system of claim **24** wherein said Twisted Nematic LCD display is a Super Twisted Nematic (STN) LCD display.

26.(original) The system of claim **24** wherein said Twisted Nematic LCD display is a Double Super-Twisted Nematic (DSTN) LCD display.

27. (currently amended) A method to achieve reduced resistance of the connections between the display controller device and the MLA common sub-groups of the display unit of an MLA LCD display system avoiding differences of contrast between adjacent lines of the LCD display unit comprising the following steps:

providing an MLA LCD display unit and a MLA LCD display controller device;

define number of lines per MLA common sub-group, each common sub-group comprising more than one consecutive lines; and

10 interlace lines of MLA common sub-groups alternately from both sides of the display control device to the correspondent sides of the display unit in a way that the uppermost MLA sub-group is driven from a first side of the MLA display control device, the second uppermost MLA sub-group is driven from the side opposite to said first side, the third uppermost MLA sub-group is
15 driven from said first side again and so on.

28.(original) The method of claim **27** wherein said common sub-group comprises any number of lines.

29.(original) The method of claim **27** wherein said common sub-group comprises three lines.

30.(original) The method of claim **27** wherein said MLA LCD display is having an active matrix.

31.(original) The method of claim **27** wherein said MLA LCD display is having a passive matrix.

32.(original) The method of claim **31** wherein said MLA LCD display is a Twisted Nematic (TN) LCD display.

33.(original) The method of claim **32** wherein said Twisted Nematic LCD display is a Super Twisted Nematic (STN) LCD display.

34.(original) The method of claim **32** wherein said Twisted Nematic LCD display is a Double Super-Twisted Nematic (DSTN) LCD display.

35. (currently amended) A method to achieve reduced resistance of the connections between the display controller device and the MLA common sub-groups of the display unit of an MLA LCD display system avoiding differences of contrast between adjacent lines of the LCD display unit comprising the following steps:

providing an MLA LCD display unit and a MLA LCD display controller device, wherein a defined number of MLA common sub-groups is bundled into a MLA common group;

define number of consecutive lines per MLA common sub-group;

define number of MLA common sub-groups per MLA common group;

and

interlace lines of MLA common groups alternately from both sides of the MLA display control device to the correspondent sides of the MLA display unit in a way that the uppermost MLA common group is driven from a first side of the MLA display control device, the second uppermost MLA common group

is driven from the side opposite to said first side, the third uppermost MLA common group is driven from said first side again and so on.

36.(original) The method of claim **35** wherein said common sub-group comprises any number of lines.

37.(original) The method of claim **35** wherein said common sub-group comprises three lines.

38.(original) The method of claim **35** wherein said MLA LCD display is having an active matrix.

39.(original) The method of claim **35** wherein said MLA LCD display is having a passive matrix.

40.(original) The method of claim **39** wherein said MLA LCD display is a Twisted Nematic (TN) LCD display.

41.(original) The method of claim **40** wherein said Twisted Nematic LCD display is a Super Twisted Nematic (STN) LCD display.

42.(original) The method of claim **40** wherein said Twisted Nematic LCD display is a Double Super-Twisted Nematic (DSTN) LCD display.

43.(new) A Multi-Line Addressing (MLA) Liquid Crystal Display (LCD) system comprising:

a display unit; and

a display controller device, wherein the lines for each common sub-group, each common sub-group comprising more than one consecutive lines, between said display unit and said display controller device are interlaced in a way that a first common sub-group is driven from a first side of the display controller device, a second common sub-group is driven from the opposite to first side of the display controller device, a third sub-group is driven from the first side again, a fourth common sub-group is driven from said opposite side again, and so on until all common sub-groups are connected between said display unit and said display controller device.

44.(new) The system of claim **43** wherein said MLA common sub-group comprises any number of lines.

45.(new) The system of claim **43** wherein said MLA common sub-group comprises three lines.

46.(new) The system of claim **43** wherein said MLA LCD display is having an active matrix.

47.(new) The system of claim **43** wherein said MLA LCD display is having a passive matrix.

48.(new) The system of claim **47** wherein said MLA LCD display is an MLA Twisted Nematic (TN) LCD display.

49.(new) The system of claim **48** wherein said MLA Twisted Nematic LCD display is an MLA Super Twisted Nematic (STN) LCD display.

50.(new) The system of claim **48** wherein said MLA Twisted Nematic LCD display is an MLA Double Super-Twisted Nematic (DSTN) LCD display.

51.(new) A Multi Line Addressing (MLA) Liquid Crystal Display (LCD) system comprising:

a display unit; and

a display controller device, wherein a number of MLA common

sub-groups, each common sub-group comprising more than one consecutive lines, are bundled into MLA common groups and the lines for each common group between said display unit and said display controller device are

interlaced in a way that a first MLA common group is driven from a first side of the display controller device, a second common group is driven from the

opposite to first side of the display controller device, a third common group is driven from the first side again, a fourth common group is driven from said opposite side again, and so on until all MLA common groups are connected between said display unit and said display controller device.

52.(new) The system of claim **51** wherein said MLA common sub-group comprises any number of lines.

53.(new) The system of claim **51** wherein said MLA common sub-group comprises three lines.

54.(new) The system of claim **51** wherein said MLA LCD display is having an active matrix.

55.(new) The system of claim **51** wherein said MLA LCD display is having a passive matrix.

56.(new) The system of claim **55** wherein said MLA LCD display is an MLA Twisted Nematic (TN) LCD display.

57.(new) The system of claim **56** wherein said MLA Twisted Nematic LCD display is an MLA Super Twisted Nematic (STN) LCD display.

58.(new) The system of claim **56** wherein said MLA Twisted Nematic LCD display is an MLA Double Super-Twisted Nematic (DSTN) LCD display.

59.(new) The system of claim **51** wherein said MLA common groups comprise two MLA common sub-groups.

60.(new) The system of claim **6** wherein said MLA common groups comprise three MLA common sub-groups.

61.(new) A Liquid Crystal Display (LCD) system comprising:

a display unit; and

a display controller device, wherein a number of consecutive common signal lines are bundled into common signal groups and the lines for each common signal group between said display unit and said display controller device are interlaced in a way that a first common signal group is driven from a first side of the display controller device, a second common signal group is driven from the opposite to first side of the display controller device, a third common signal group is driven from the first side again, a fourth common signal group is driven from said opposite side again, and so on until all common signal groups are connected between said display unit and said display controller device.

62.(new) The system of claim **61** wherein said common signal group comprises any number of lines.

63.(new) The system of claim **61** wherein said common signal group comprises two lines.

64.(new) The system of claim **61** wherein said common signal group comprises three lines

65.(new) The system of claim **61** wherein said LCD display is having a passive matrix.

66.(new) The system of claim **65** wherein said LCD display is a Twisted Nematic (TN) LCD display.

67.(new) The system of claim **66** wherein said Twisted Nematic LCD display is a Super Twisted Nematic (STN) LCD display.

68.(new) The system of claim **66** wherein said Twisted Nematic LCD display is a Double Super-Twisted Nematic (DSTN) LCD display.

69.(new) A Multi-Line Addressing (MLA) Liquid Crystal Display (LCD) controller device driving an MLA LCD display unit, wherein the lines for each common sub-group, each common sub-group comprising more than one consecutive lines, between said LCD display unit and said display controller device are interlaced in a way that a first common sub-group is driven from a first side of the display controller device, a second common sub-group is driven from the opposite to first side of the display controller device, a third sub-group is driven from the first side again, a fourth common sub-group is driven from said opposite side again, and so on until all common sub-groups are connected.

70.(new) The controller device of claim **69** wherein said MLA common sub-group comprises any number of lines.

71.(new) The controller device of claim **69** wherein said MLA common sub-group comprises three lines.

72.(new) The controller device of claim **69** wherein said MLA LCD display is having an active matrix.

73.(new) The controller device of claim **69** wherein said MLA LCD display is having a passive matrix.

74.(new) The controller device of claim **73** wherein said MLA LCD display is an MLA Twisted Nematic (TN) LCD display.

75.(new) The controller device of claim **74** wherein said MLA Twisted Nematic LCD display is an MLA Super Twisted Nematic (STN) LCD display.

76.(new) The controller device of claim **74** wherein said MLA Twisted Nematic LCD display is an MLA Double Super-Twisted Nematic (DSTN) LCD display.

77. (new) The controller device of claim **69** wherein all common sub-groups driven from a first side of the display controller device are connected to the same first side of said LCD display unit and all common sub-groups driven

from the opposite to first side of the display controller device are connected to the correspondent side of said LCD display unit opposite to the previous side.

78.(new) A Multi-Line Addressing (MLA) Liquid Crystal Display (LCD) controller device, wherein a number of MLA common sub-groups are bundled into MLA common groups and the lines for each common group, each common sub-group comprising more than one consecutive lines, between said display unit and said display controller device are interlaced in a way that a first MLA common group is driven from a first side of the display controller device, a second common group is driven from the opposite to first side of the display controller device, a third common group is driven from the first side again, a fourth common group is driven from said opposite side again, and so on until all MLA common groups are connected between said display unit and said display controller device.

79.(new) The controller device of claim **78** wherein said MLA common sub-group comprises any number of lines.

80.(new) The controller device of claim **78** wherein said MLA common sub-group comprises three lines.

81.(new) The controller device of claim **78** wherein said MLA LCD display is having an active matrix.

82.(new) The controller device of claim **78** wherein said MLA LCD display is having a passive matrix.

83.(new) The controller device of claim **82** wherein said MLA LCD display is an MLA Twisted Nematic (TN) LCD display.

84.(new) The controller device of claim **83** wherein said MLA Twisted Nematic LCD display is an MLA Super Twisted Nematic (STN) LCD display.

85.(new) The controller device of claim **83** wherein said MLA Twisted Nematic LCD display is an MLA Double Super-Twisted Nematic (DSTN) LCD display.

86.(new) The controller device of claim **78** wherein all common sub-groups driven from a first side of the display controller device are connected to the same first side of said LCD display unit and all common sub-groups driven from the opposite to first side of the display controller device are connected to the correspondent side of said LCD display unit opposite to the previous side.

87.(new) A method to achieve reduced resistance of the connections between the display controller device and the MLA common sub-groups of the display unit of an MLA LCD display system avoiding differences of contrast between adjacent lines of the LCD display unit comprising the following steps:

providing an MLA LCD display unit and a MLA LCD display controller device;

define number of consecutive lines per MLA common sub-group; and
interlace lines of MLA common sub-groups alternately from both sides
of the display control device to the correspondent sides of the display unit in a
way that a first MLA sub-group is driven from a first side of the MLA display
control device, a second MLA sub-group is driven from the side opposite to
said first side, a third MLA sub-group is driven from said first side again and so
on.

88.(new) The method of claim **87** wherein said common sub-group comprises
any number of lines.

89.(new) The method of claim **88** wherein said common sub-group comprises
three lines.

90.(new) The method of claim **87** wherein said MLA LCD display is having an
active matrix.

91.(new) The method of claim **87** wherein said MLA LCD display is having a
passive matrix.

92.(new) The method of claim **91** wherein said MLA LCD display is a Twisted
Nematic (TN) LCD display.

93.(new) The method of claim **92** wherein said Twisted Nematic LCD display is a Super Twisted Nematic (STN) LCD display.

94.(new) The method of claim **92** wherein said Twisted Nematic LCD display is a Double Super-Twisted Nematic (DSTN) LCD display.

95. (new) A method to achieve reduced resistance of the connections between the display controller device and the MLA common sub-groups of the display unit of an MLA LCD display system avoiding differences of contrast between adjacent lines of the LCD display unit comprising the following steps:

5 providing an MLA LCD display unit and a MLA LCD display controller device, wherein a defined number of MLA common sub-groups is bundled into MLA common groups;

 define number of consecutive lines per MLA common sub-group;

 define number of MLA common sub-groups per MLA common group;

10 and

 interlace lines of MLA common groups alternately from both sides of the MLA display control device to the correspondent sides of the MLA display unit in a way that a first MLA common group is driven from a first side of the MLA display control device, a second MLA common group is driven from the side opposite to said first side, a third MLA common group is driven from said
15 first side again and so on.

96.(new) The method of claim **95** wherein said common sub-group comprises any number of lines.

97.(new) The method of claim **95** wherein said common sub-group comprises three lines.

98.(new) The method of claim **95** wherein said MLA LCD display is having an active matrix.

99.(new) The method of claim **95** wherein said MLA LCD display is having a passive matrix.

100. (new) The method of claim **99** wherein said MLA LCD display is a Twisted Nematic (TN) LCD display.

101. (new) The method of claim **100** wherein said Twisted Nematic LCD display is a Super Twisted Nematic (STN) LCD display.

102. (new) The method of claim **100** wherein said Twisted Nematic LCD display is a Double Super-Twisted Nematic (DSTN) LCD display.

103. (new) The system of claim **95** wherein said MLA common groups comprise two MLA common sub-groups.

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104. (new) The system of claim **95** wherein said MLA common groups comprise three MLA common sub-groups.